

Ch 8 Test--tomorrow

8.1 Angle Measures in a Polygon

- $(n-2)180$
- 360
- regular

8.2 Properties of a Parallelogram

- facts

- opp sides \cong
- opp sides \parallel
- opp \angle s \cong
- diag. bis. each other
- cons. \angle s suppl.

8.3 Showing a quadrilateral is a Parallelogram

- Converses (5 ways)

- def of \square
- Show Both pairs opp \parallel , then \square
- Show Both pairs opp \angle s \cong , then \square
- Show diag. bis. each other, then \square
- one pair opp sides \cong + \parallel , then \square

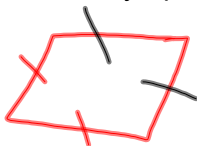
8.4 Properties of Rectangles, Rhombuses, and Squares

Rect	Rhombus	Square
- 5 \square facts	- 5 \square facts	
- 4 rt \angle s	- 4 \cong sides	everything
- diag. \cong	- diag \perp	
	- diag bis \angle s	

8.5 Properties of Trapezoids and Kites

Trapezoid	Kite
1 pair \parallel sides	- Consec \cong sides
1 set \cong legs	- diag \perp
\cong diagonals	- 1 set of opp \cong \angle s
\cong base \angle s	

8.6 Identify Special Quadrilaterals



Ch 8 Coordinates

① Know \square

- check diagonals

slope \perp (Rhombus)
 dist \cong (Rect) \rightarrow Squ.

② Quad

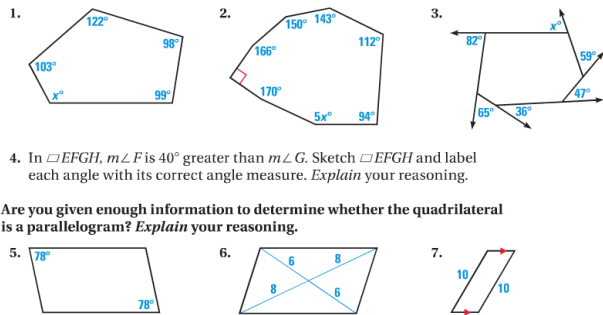
Kite

- slope
 - dist

Review assignment
p564 #s 1-12, 14-18
p555 #s 18-24

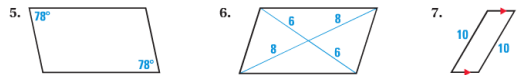
Be sure to review your proof
packets!

Find the value of x .



4. In $\square EFGH$, $m\angle F$ is 40° greater than $m\angle G$. Sketch $\square EFGH$ and label each angle with its correct angle measure. *Explain* your reasoning.

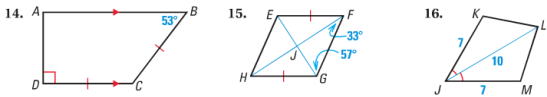
Are you given enough information to determine whether the quadrilateral is a parallelogram? *Explain* your reasoning.



- In Exercises 8–11, list each type of quadrilateral—*parallelogram*, *rectangle*, *rhombus*, and *square*—for which the statement is always true.
- 8. It is equilateral.
 - 9. Its interior angles are all right angles.
 - 10. The diagonals are congruent.
 - 11. Opposite sides are parallel.

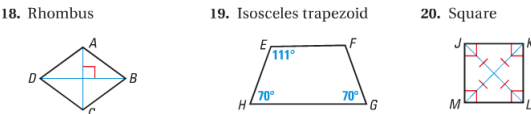
12. The vertices of quadrilateral $PQRS$ are $P(-2, 0)$, $Q(0, 3)$, $R(6, -1)$, and $S(1, -2)$. Draw $PQRS$ in a coordinate plane. Show that it is a trapezoid.

Give the most specific name for the quadrilateral. *Explain* your reasoning.



- 17. In trapezoid $WXYZ$, $\overline{WX} \parallel \overline{YZ}$, and $YZ = 4.25$ centimeters. The midsegment of trapezoid $WXYZ$ is 2.75 centimeters long. Find WX .
- 18. In $\square RSTU$, \overline{RS} is 3 centimeters shorter than \overline{ST} . The perimeter of $\square RSTU$ is 42 centimeters. Find RS and ST .

IDENTIFYING QUADRILATERALS Tell whether enough information is given in the diagram to classify the quadrilateral by the indicated name. *Explain*.



COORDINATE PLANE Points P , Q , R , and S are the vertices of a quadrilateral. Give the most specific name for $PQRS$. *Justify* your answer.

- 21. $P(1, 0)$, $Q(1, 2)$, $R(6, 5)$, $S(3, 0)$
- 22. $P(2, 1)$, $Q(6, 1)$, $R(5, 8)$, $S(3, 8)$
- 23. $P(2, 7)$, $Q(6, 9)$, $R(9, 3)$, $S(5, 1)$
- 24. $P(1, 7)$, $Q(5, 8)$, $R(6, 2)$, $S(2, 1)$